

Title (en)
METHOD OF DETECTING AND QUANTIFYING ANALYTES OF INTEREST IN A LIQUID AND IMPLEMENTATION DEVICE

Title (de)
VERFAHREN ZUR DETEKTION UND QUANTITATIVEN BESTIMMUNG VON ANALYTEN VON INTERESSE IN EINER FLÜSSIGKEIT UND VORRICHTUNG DAFÜR

Title (fr)
PROCEDE DE DETECTION ET DE QUANTIFICATION D'ANALYTES D'INTERET DANS UN LIQUIDE ET DISPOSITIF DE MISE EN OEUVRE

Publication
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Application
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Abstract (en)
[origin: WO2010112699A1] The invention provides a method of detecting and quantifying analytes present in a solution, which is portable, rapid, inexpensive, selective and ultra-sensitive. For this purpose, the subject of the invention is a method of detecting and quantifying analytes of interest (2) in a specimen (1) of liquid obtained from a mother liquor, the liquid being able to evaporate in an atmosphere (Atm) under defined evaporation conditions, the method comprising the following steps: b) the specimen (1) is deposited on a substrate (10) having a microstructured or nanostructured surface (20) defining analyte capture probes, in order for the liquid specimen to at least partially cover the structured surface of the substrate; c) the specimen undergoes controlled evaporation (5) in the vicinity (VT) of a liquid/substrate/atmosphere triple line (T), in such a way that this triple line moves, at a controlled rate, over the structured surface of the substrate as the liquid evaporates into the atmosphere, and so that the target analytes are captured, by convective assembly and directed capillary action, by the probes; and d) the structured surface of the substrate obtained after step c) is analysed.

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L. MALAQUIN ET AL: "controlled particle placement through convective and capillary assembly", LANGMUIR, vol. 23, 10 February 2007 (2007-02-10), pages 11513 - 11521

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